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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/846,426 | 04/30/2001 | Qiang Bi | 23182 | 4608 |

7590 04/20/2005

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| EXAMINER | |
|---|---|
| WONG, KIN C | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2651 | |

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/846,426 | BI ET AL. | |
| | Examiner | Art Unit | |
| | K. Wong | 2651 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *31-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This is a response to amendment filed on 5/7/04.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims (31-50) are rejected under 35 U.S.C. 102(e) as being anticipated by Ehrlich et al (6519107).

Regarding claim 41: Ehrlich et al discloses an apparatus including a servo writer apparatus (as depicted in figure 1) which positions a data transducer (element 15 in figure 1) to write servo data to a recording surface using a positioning signal generated by the servo writer apparatus in combination with readback signal transduced by the data transducer from previously written servo data on the recording surface (in col. 8, line 65 to col. 9, line 39 where Ehrlich et al describes how the subsequent servo data is recorded on the disk surface with the combined control of the servo writer position control and the reading of the previously written servo data from the readback transducer).

Regarding claim 42: Ehrlich et al teaches that wherein the servo writer apparatus previously positions the data transducer to write the previously written servo data to the recording surface (in col. 9, lines 16-25 of Ehrlich et al).

Regarding claim 43: Ehrlich et al depicts in figure 8 that wherein the servo data written using the positioning signal and the readback signal is characterized as second servo data written to a second portion of the recording surface, wherein the previously written servo data is characterized as first servo data written to a first portion of the recording surface, and wherein the first and second servo data are written by a write element of the data transducer which is separated from the read element a distance nominally equal to a distance between the first servo data and the second servo data (see associated descriptions for details).

Regarding claim 44: Ehrlich et al teaches that where the servo writer apparatus biases the data transducer in a fixed position while writing the previously written servo data using a write element of the data transducer, and incrementally advances the data transducer until the read element is positioned over the previously written servo data to measure an offset distance between the read element and the write element (in col. 9, lines 16-39 of Ehrlich et al).

Regarding claim 45: Ehrlich et al depicts in figure 8 that wherein the servo writer apparatus divides the offset distance into a plurality of track intervals, and wherein the servo writer apparatus writes the servo data in relation to the track intervals (see associated descriptions for details).

Regarding claim 46: the limitations of furthering includes control circuitry which determines a zero acceleration path (ZAP) from the transduced readback signal to account for mechanical disturbances during the writing, and wherein the data transducer is positioned in relation to the determined ZAP are considered inherent

because in col. 15, line 49 to col. 16, line 35 where Ehrlich et al describes the noted functions of above which also in-line with the instant specification on page 11, lines 1-27.

Regarding claim 47: Ehrlich et al teaches that wherein the servo writer apparatus includes a push pin which advances the data transducer and a measurement system which measures a position of the push pin to derive the generated positioning signal (in col. 8, line 65 to col. 9, line 15 of Ehrlich et al).

Regarding claim 48: the limitations of wherein the servo data written by the servo writer apparatus includes servo positioning dibits which provides intra-track positioning data for an associated track on the recording surface are considered inherent because in col. 3, lines 32-57 where Ehrlich et al describes the similar positional data format.

Regarding claim 49: Ehrlich et al teaches that wherein the servo data written by the servo writer apparatus includes track address data used to identify a particular track on the recording surface (in col. 6, lines 65-67 of Ehrlich et al).

Regarding claim 50: Ehrlich et al depicts that wherein the data transducer and the recording surface of the positioning {step} instructions are incorporated into a data storage device coupled to the servo writer apparatus (see associated descriptions for details).

Regarding claims 31-40: method claims (31-40) are drawn to the method of using the corresponding apparatus as claimed in claims (41-50). Therefore, the method claims (31-40) correspond to the apparatus claims (31-40) and are rejected for the same reasons of anticipation as used above.

### *Response to Arguments*

Applicant's arguments filed 5/7/04 have been fully considered but they are not persuasive. Applicant's assertion in regarding to Ehrlich et al '107 on page 11 of the remarks (5/7/04), Ehrlich et al fails to suggest or disclose the combined positioning signal from the servo-writer and the readback signal from the data transducer on the previously written servo data on the disk surface. Applicant is directed to col. 8, line 65 to col. 9, line 39 and col. 15, lines 18-26 of Ehrlich et al where the combination of the servo-writer position control and data transducer position control are integrated in the servo data writing process on the servo-writer. Therefore, Ehrlich et al does disclose the integrated combination of the servo-writing position control and the data transducer position control.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (571) 272-7566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kw

12 Apr 05

DAVID HUDSPETH
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